

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

REMARKS

I. Present Status of the Application

The Office Action objected the drawings and objected the specification because of non-descriptiveness of the title. The Office Action rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Lee et al. (US 5,177,450). The Office Action further rejected claims 2-5 under 35 U.S.C. § 103(a) as being unpatentable over Lee et al.

Upon entry of the amendments in this response, the title of the invention, the drawings, and claim 2 are amended; and claims 6-7 are added. Claim 2 is amended to clear up a matter of form. Claims 1-7 are now pending in the present application, with claims 1, 4, 6 and 7 being independent claims. Applicant believes that the foregoing amendments do not introduce new matter. Thus, reconsideration of those claims is respectfully requested.

II. Response to Objections and Rejections

A. Objections to the drawings

The Office Action, at page 2, items 2-3, objected the drawings. The Examiner states that blocks 202 and 204 are not labeled. In accordance with the Examiner's request, Applicant has made drawing corrections by labeling the blocks 202 and 204 with "data driver" and "scan

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

driver," respectively. Accordingly, Applicant respectfully submits that the objection has been overcome and should be withdrawn.

B. Objection to the specification

The Office Action, at page 2, items 4-5, objected the title of the invention. The Examiner states that the title of the invention is not descriptive. In accordance with the Examiner's request, Applicant has changed the title of the invention. Accordingly, Applicant respectfully submits that the objection has been overcome and should be withdrawn.

C. Rejections under 35 U.S.C. § 102(b)

The Office Action, at page 3, item 7, rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Lee et al. Applicant respectfully traverses the rejection for at least the reasons set forth below.

To anticipate a claim, the prior art reference must teach each and every element of the claim, and the elements must be arranged as required by the claim. M.P.E.P. § 2131.

Claim 1 of the invention is directed to a digital-analog converting circuit of a display, comprising a plurality of transistors, wherein the ratio of channel-width to channel-length of each transistor is identical.

Lee et al. teach a circuit of "CMOS power amplifier" (Fig. 2; column 3, lines 17-34; abstract), and the circuit has "a differential input amplifying stage 10 for amplifying differential

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

input signals," "a high gain amplifying stage 20 for increasing the gain of signals amplified," and "an output stage 30 for driving a load" (column 3, lines 18-26). Lee et al. do not disclose a "digital-analog converting circuit of a display," i.e., Lee et al. do not disclose a "converting circuit" for digital to analog conversion, and further, do not teach that the converting circuit is "of a display." Apparently, a person of ordinary skill in the field of the invention would consider that the circuit of "CMOS power amplifier" disclosed in Fig. 2 by Lee et al. is different from the "digital-analog converting circuit of a display" recited in claim 1 of the present invention.

Therefore, Lee et al. do not anticipate claim 1 since Lee et al. do not disclose each and every element of the claims. Accordingly, Applicant respectfully submits that the grounds of rejection have been addressed and the rejection has been overcome. Reconsideration and withdrawal of the rejection are respectfully requested.

D. Rejections under 35 U.S.C. § 103(a)

The Office Action, at page 3, item 9, rejected claims 2-5 under 35 U.S.C. § 103(a) as being unpatentable over Lee et al. The Examiner states that Lee et al. discloses essential features of the claimed invention except for a control device that receives a plurality of bits to drive the plurality of transistors and for a converter that drives a plurality of pixels. Examiner further asserts that one of ordinary skill in the art would have been motivated to use transistors of

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

identical width to length ratio as taught by Lee et al. to Lee et al.'s circuit to minimize distortion in digital to analog converter circuit. Applicant respectfully traverses the rejection.

When applying to obviousness rejections, the references as well as the claimed invention must be considered as a whole. M.P.E.P. § 2141. Further, to establish prima facie obviousness of a claimed invention, all the claim limitation must be taught or suggested by the prior art. M.P.E.P. § 2143.

Claims 2 and 3 are dependent on claim 1. As discussed in the foregoing subsection, a person of ordinary skill in the field of the invention would consider that the "digital-analog converting circuit of a display" recited in claim 1 is different from the circuit of "CMOS power amplifier" disclosed in Fig. 2 by Lee et al. Thus, either claim 2 or claim 3 inherits such features from the parent claim 1, which features are distinguishable from that of Lee et al. Moreover, claim 2 further recites "a control device coupled to the transistors to receive a plurality of data bits," and claim 3 further recites that the digital-to-analog converting circuit is "operative to generate a data current to drive a plurality of pixels of the display." As stated by the Examiner, these features further recited in claims 2 and 3 are not disclosed by Lee et al. It is clear that the further recited features in claim 2 or 3 coupled with the distinguishing features inherited from claim 1, when considered as a whole, would make the recited invention in either claim 2 or claim 3 non-obvious over the teaching in Lee et al.

Regarding claims 4 and 5, Applicant respectfully traverses the rejections based on reasons similar to that for claims 2 and 3 discussed above.

Customer No.: 31561

Application No.: 10/065,917

Docket No.: 9023-US-PA

Thus, even though Lee et al. disclose transistors having identical width to length ratio, it is clear that the circuits recited in claims 2-5 are not within the scope of and thus not simple analogs of those disclosed by Lee et al. As considered as a whole, it seems clear that one of ordinary skills in the art is not suggested or motivated to use transistors taught by Lee et al. to minimize distortion in digital to analog converting circuit.

Accordingly, for at least the foregoing reasons, Applicant respectfully submits that the grounds of rejection have been addressed and the rejection has been overcome. Reconsideration and withdrawal of the rejection are respectfully requested.

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

III. New Claims

Claims 6-7 have been newly added to further define the scope of the invention. The above new claims are submitted to be patentable over the prior art of record for at least the following reasons.

The newly added claims 6 and 7 incorporate certain features of the original claims 1, 2 and 4, and limitations disclosed in, for example, Fig. 3, and specification, paragraphs [0008] to [0012], [0024] and [0025]. Applicant believes that new claims 6-7 are neither anticipated nor rendered obvious, and thus are allowable over the prior art of record for at least the aforementioned reasons supporting the original claims 1-5.

Applicant intend that these new claims 6-7 be interpreted pursuant to 35 U.S.C. § 112, ¶ 6, and intend that claims 6-7 not fall within the purview of and be interpreted in accordance with said section.

Customer No.: 31561
Application No.: 10/065,917
Docket No.: 9023-US-PA

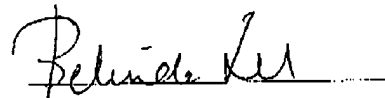
CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-7 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

Dec. 10, 2003



Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office
7th Floor-1, No. 100
Roosevelt Road, Section 2
Taipei, 100
Taiwan
Tel: 011-886-2-2369-2800
Fax: 011-886-2-2369-7233
Email: belinda@jcipgroup.com.tw
Usa@jcipgroup.com.tw